Chapter Six

Intermodal Inventory and Other Issues

Public Transit
Air Transportation
Rail Transportation
Water and Port Transportation
Regional Intermodal Study
Non-Motorized Transportation
Intelligent Transportation Systems (ITS)

Intermodal Inventory

The BCATS area is currently served by many forms of transportation. This provides accessibility which extends to connections both inside and outside the Metropolitan Area Boundary. The state trunkline highway network including two freeways and five state highways, the county and municipal arterials and collectors have been discussed previously in this report.

Although the street and highway system is a very high priority with transportation planners, so are the other modes of transportation in the Bay City area. We are truly a multi-modal community as described on the following pages.

Public Transit

Existing Conditions

The Bay Metropolitan Transportation Authority (BMTA), organized under Public Act 196 of 1986, as amended, is the sole publicly owned transportation system operating in Bay County. Its service area is countywide. In fiscal year 2006, BMTA carried 620,000 riders. In addition to BMTA services, four public school districts, a few private carriers and numerous social service agencies provide rides for students and agency clients in the county. BMTA contracts with two private carriers to supplement the passenger capacity for its paratransit, demand response service.

BMTA Services

The Bay Metropolitan Transportation Authority is an independent local authority governed by a eleven member board of directors. Board Members are appointed by the Bay County Board of Commissioners. In FY 2006, the BMTA operated 46 buses and 12 vans in fixed route and demand response service. Ten traditional fixed routes operate in the Bay City area and serve non-urban locations such as Pinconning, Linwood, Kawkawlin, Auburn, and University Center (Delta College and Saginaw Valley State University). The fixed routes also allow for connections to public transit services in Arenac, Midland, and Saginaw Counties. All fixed routes operate Monday through Saturday. Tripper routes (flexed routes) are operated countywide throughout the year. These routes take individuals to and from work sites for the disabled, to educational facilities, and to child care centers. A countywide demand response system (DART) is also operated Monday through Saturday. This service provides curb-to-curb rides for seniors and disabled residents.

BMTA fixed and flexed route services are operated between the hours of 6:00 am and 6:30 pm weekdays and between 8:30 am and 6:30 pm on Saturday. The base fare for fixed route service is $0.80. Seniors and the disabled (including those with a valid medicare card) pay $0.40 and full-time students of any age pay $0.60. Transfers are free. The demand response fare is $1.00 for all rides.

Future Conditions

Bay Metro Transit is currently engaged in an effort to identify the types of transit service that it will need to operate in the community 5 years and 10 years from today in order to determine what sort of capital investment may be needed to support the service and whether the current revenue stream will be sufficient to operate at the anticipated level. The following factors are being examined:

Demographic make-up of the current service area population and projections of population 10 years from now. With the aging of the population (as baby boomers retire) it appears the need for more demand-response transit service is likely. This is a much more expensive type of service to provide and may require the elimination or reduction of other transit services currently being provided. The Bay Metro service area covers the entire county. About 85% of the county lies outside the urbanized area and about 33% of the population lives outside the urbanized area, making demand-response service even more difficult and expensive.

Bay Metro is researching various demand-response scheduling systems for future use as well as the type of employees who will be needed to operate the systems. Unless the efficiency of the current demand-response [paratransit] system can be significantly improved the cost to run an expanded version of that system may be unsupportable.

Gradually diminishing, and ultimately discontinuing, some of the current transit services offered, in order to expand the demand-response system, must be handled very carefully since the transit authority receives a large share of its operating revenues (about 30%) from a local property tax that must be renewed every 5 years.

Bay Metro is also researching to possibility of upgrading the basic fixed route system, at least during peak times in the urban area. If there were to be a shift in attitude concerning local transit usage, whether in response to the cost of gasoline or concerns for the environment, etc, the current system could not accommodate much of an increase in ridership. Some buses at peak times are already standing room only. Reducing current headways of 45 minutes to something like 15 minutes would be one important response to a significant increase in transit ridership, but the question must be answered as to where the buses would come from to provide the service and how the service would be financed. Either other lower priority services would have to be discontinued or additional funds would have to be found.

Bay Metro Transit serves Bay County, Michigan, only, although it does make regular connections with transit systems in the adjacent counties of Saginaw, Midland and Arenac. Bay County is a geographic area of about 450 square miles with a population of about 110,000. Following the next census in 2010, it is very possible that the three urban areas in our region (Bay, Saginaw, Midland)

will be consolidated into a single urbanized area. These three counties include about 1,800 square miles of territory with a population in excess of 400,000. Regional consolidation could have a significant impact on the four local transit systems that operate in the area, especially since they would be sharing the same annual federal FTA allocation for the urban area. In the coming years, it would be wise to begin the effort to examine the possibility of either consolidating the systems or developing a coordination plan to make travel between the communities more seamless. Consolidation seems unlikely at this time for at least two main reasons. First, the political climate is not conducive to the surrender of local control of anything, let alone public transit. Second, each system is funded differently at the local level. One is funded with city general funds. Another is funded with a city only property tax. One is funded with a countywide property tax controlled by the transit system. One is funded with a countywide property tax controlled by the county government. Funding rates are different in each community. As a result, fare structures are different. Two of the systems are strictly demand-response. Two of the systems are fixed route with a demand-response component.

A few years ago, a regional transit study was conducted with grant funds provided by the Michigan DOT. That study covered a 10 county area. The study concluded that in this large region it was not possible to identify enough regional transit trips to justify pursuing a 10 county regional transportation system. Perhaps another study could be conducted using that study as a starting point, concentrating on the three urban counties which make up the core of the region. This would be a major undertaking requiring buy-in by the three counties and grant funds to hire a consultant to coordinate the data collection and analysis. As a regional study, it could also incorporate other modal features, like air travel (MBS International Airport), intercity bus service and, perhaps, even the Saginaw River port.

Transportation Enhancement Activities

Two types of enhancements might be beneficial to local transit service. First is the intermodal terminal in downtown Bay City which serves both local public transit and the intercity bus systems. The site functions well but there are very few amenities for passengers and visitors. Better customer service facilities are needed, both to handle customers who appear in person at the terminal and to deal with telephone callers. The site also needs to be made more pedestrian friendly, both in terms of access to the site and circulation within the site. It would be useful to incorporate bicycle storage facilities on the site as well to accommodate those wishing to ride a bicycle to the terminal to board a bus.

Coordinating local transit service with non-motorized modes (pedestrians, bicycles) is the second area where enhancement projects would make sense. If transit usage is expanded beyond the transit-dependent population it will be necessary to consider park and ride lots for both automobile users and bicyclists. Bike lockers are amenities that could greatly enhance the ability of bicyclists to

interface with the transit system. Providing better ways to accommodate bicyclists who wish to bring their bike along when using the bus need to be found as well. The buses currently used in local fixed route service cannot be fitted with exterior bike racks. As a result, bikes must be secured inside the bus. This sometimes causes conflicts with individuals using wheelchairs and scooters who need to use the securement locations for their equipment. Erecting secure bike lockers in very visible locations (the mall, schools, medical facilities, etc) as part of a park and ride program might help to address this issue.

Transit Financing

In 2004, the voters of Bay County approved a county-wide .75 mill transportation tax renewal good through the year 2010. Revenues in excess of $1,600,000 have been generated annually since that time. This strong local support has enabled the Authority to operate smoothly in spite of decreasing support from the state and federal governments. The State of Michigan is still an important player in terms of operating support, presently providing about 36 percent of operating revenues as well as the 20 percent local match for most capital improvements. The role of the Federal Transit Administration has been mostly in the area of capital acquisitions, providing 80 percent of the funds for most major items (buses, building improvements, and maintenance equipment).

Financial Planning

Bay Metro Transit staff is currently projecting forward 10 years into the future to determine the type of public transit service likely to be provided at that time, and the likely cost to operate the service. Staff is also projecting likely sources of revenue, assuming current funding levels continue, to determine whether a revenue shortfall is to be expected. If a shortfall is anticipated, then one of two things must happen; the system must either reduce the level of service provided, and perhaps the types of service provided, or find additional local funds to cover the shortfall. If demand for local transit service increased to the point where the general public called for more or better transit service it would be possible to request an increase in the local millage rate. Having received millage funds since 1981 the staff has enough data to be able to project revenues likely to result from changes in the tax rate well into the future. More difficult to project are federal and state assistance levels. For projection purposes, Bay Metro will assume that current funding levels will hold steady with very slight annual increases into the future.

While many revenues are beyond the control of the local transit system, expenses are things that are under local control. How many persons are employed, how much they are paid, what types of benefits they receive, etc, are decisions made locally. The goal of the current effort of looking 10 years into the future is to make sure, at least for the next decade, that annual balanced operating budgets are possible. Revenue projections and expense projections based on anticipated service levels will be developed to accomplish this goal.

Plan Recommendations:

1. Continue vehicle replacement program.

2. Increases the efficiency of demand-response system.

3. Begin the effort to examine the possibility of either consolidating the public transit systems in Bay, Midland and Saginaw counties or developing a coordination plan to make travel between the 3 communities more seamless.

4. Improve the ability, safety and security for bicyclist to utilize BMTA services through bike lockers at various Park & Ride locations and bike transport on the buses.

Air Transportation

The BCATS area is served by two airport, MBS International Airport and the City of Bay City owned James Clements Airport on (M-13) River Road. MBS is a class D-III airport and James Clement is a class B-II airport and both are defined as Tier 1 Airports in the Michigan Airport System Plan 2000 (MASP 2000).

The Michigan Airport System Plan (MASP 2000) documents the planning process that identifies the aviation role of public use airports in Michigan through the year 2020. ***MASP 2000*** presents the results of a system planning process that has been aligned with the goals and objectives of MDOT's State Long Range Plan. The ***MASP 2000*** supports programming decisions and is useful in evaluating programming actions related to airport system and airport facility deficiencies.

Among the key functions of the ***MASP 2000*** is, from a state perspective, identifying those airports that can best respond to state goals and objectives. To this end, all airports, following a rigorous analytical process, were assigned to one of three tiers based on their contribution to state goals. Tier 1 airports respond to critical/essential state airport system goals. These airports should be developed to their full and appropriate level. Tier 2 airports complement the essential/critical state airport system and/or respond to local community needs. Focus at these airports should be on maintaining infrastructure with a lesser emphasis on facility expansion. Tier 3 airports duplicate services provided by other airports and/or respond to specific needs of individuals and/or small businesses. A series of system goals were identified as an outcome of an issue identification process related to the *State Long Range Plan*. The system goals identified were...

- Airports should serve significant population centers

- Airports should serve significant business centers
- Airports should serve significant tourism/convention centers
- Airports should provide access to the general population
- Airports should provide adequate land area coverage
- Airports should provide adequate regional capacity, and
- Airports should serve seasonally isolated areas.

MBS International Airport

MBS International Airport was conceived in the 1930's to serve the entire Saginaw Valley and surrounding communities. The airport is owned by the cities of Midland, Saginaw and the County of Bay. It is centrally located between these three communities in the northeastern portion of Saginaw County. The airport was, prior to 1994, known as Tri-City International Airport. The airport is operated by the MBS International Airport Commission.

The airport has two main runways with lengths of 8002 and 6400 feet. Both runways are 150 feet wide. The Instrument Landing System is the Category One type common at Michigan airports outside of Detroit Metro. It is adequate for most weather conditions.

MBS has experienced a 35% decline in scheduled passengers since 1998 when the airport peaked with 589,798 down to only 382,140 for 2006 according to the Michigan Department of Transportation Measure of Michigan Air Demand. Part of the decline can be attributed to the post 9-11 period and the growth of Flint's Bishop International Airport. This ranks MBS the 7th busiest airport in Michigan, behind Kalamazoo/Battle Creek and ahead of Sawyer Airport in Marquette County. Northwest Airlines and United Express/Sky West are currently operating daily scheduled flights in and out of MBS.

In 2001 MBS added daily charter service flights, run by Pace Airlines, which has carried nearly 21,203 passengers in 2006. These passengers are consider Supplemental Passengers, those traveling on charter or other for hire air services, and are not included among scheduled passengers.

Air cargo activity of 467,711 pounds in 2006, down from 1,426,197 pounds in 2005. This decrease is seen through much of the state as well as the decline of GM shipments from the Tri-City region. MBS is served by Fed Ex and DHL Express - both of which have terminals just outside the airport property.

James Clements

The city of Bay City owned James Clements Airport was originally founded in 1930. Today the airport consists of two (2) asphalt runways with lengths of 2,619 ft and 3,800 ft., and three (3)

seaplane runways on the Saginaw River two (2) of which are 3,500 ft. in length and the other at 2,600 ft.

In a recently completed a five-year capital improvement plan for James Clements Airport (2007-2011), nearly $2.3 million in capital improvements are planned. These include construction of new hangers, rehabilitation of the historic hanger and the development of a seaplane base on the Saginaw River. In Michigan, there are only 7 seaplane bases and only two that are available for public use, one being James Clements.

Plans also exist for the extension of runway 18 by 700 LF is to allow for based operation of jet and turbo-prop aircraft. This would require property acquisition and with limited funding available, the runway extension is currently not in development.

Plan Recommendations:

1. Promote the new terminal construction plans at MBS to increase the market share of air transportation.

2. Encourage the continued operation of James Clement Airport as long as these operations are efficient and feasible.

3. Continue development of new hangers, taxi-streets, aprons and auto parking facilities.

4. Design and development of James Clements Airport as a Seaplane Base in addition to the existing facilities.

5. Provide for adequate access and connectivity between air and other modes of transportation.

Rail Transportation

While Michigan's rail miles have decreased over the past decade, the number of carloads has grown by almost 11 percent. This has made private carriers much more stable than in previous decades and has enabled them to keep mainline railroads in better condition, at the expense of abandonment of light-density lines. The abandonment of certain routes has left some areas without service or with rail links dependent on maintenance subsidies.

Twenty-one percent of Michigan's rail miles are state owned. The state owns 872 miles of right-of-way, of which 650 are in use, with the balance preserved for possible future use. Maintenance is partially at state expense. Six private carriers under contract to the state operate state-owned routes.

Three rail lines provide service to the BCATS area. Scheduling can vary but generally, the Huron & Eastern Railway operated by RailAmerica Inc. runs four trains daily on their lines, Saginaw Bay Southern operated by Lake State Railway runs one train twice daily and another three trains once a week, and the Lake State Railway runs two trains through the BCATS area. The majority of commodities shipped in, out, or through the BCATS region include chemical products, coal, stone, and other bulk material. None of the rail lines in the study area provide passenger service.

The Federal Railroad Administration wants to remove 25 percent of the existing highway grade crossings. Most should be closed permanently. Some should be separated at grade. These measures would substantially improve rail safety, while allowing operating speeds to be increased, adding to the quality of service and the capacity of routes.

A coordinated effort to improve rail crossings by local, state and federal governments, and by private business interests would enhance efforts to maximize Michigan's ability to compete for international trade.

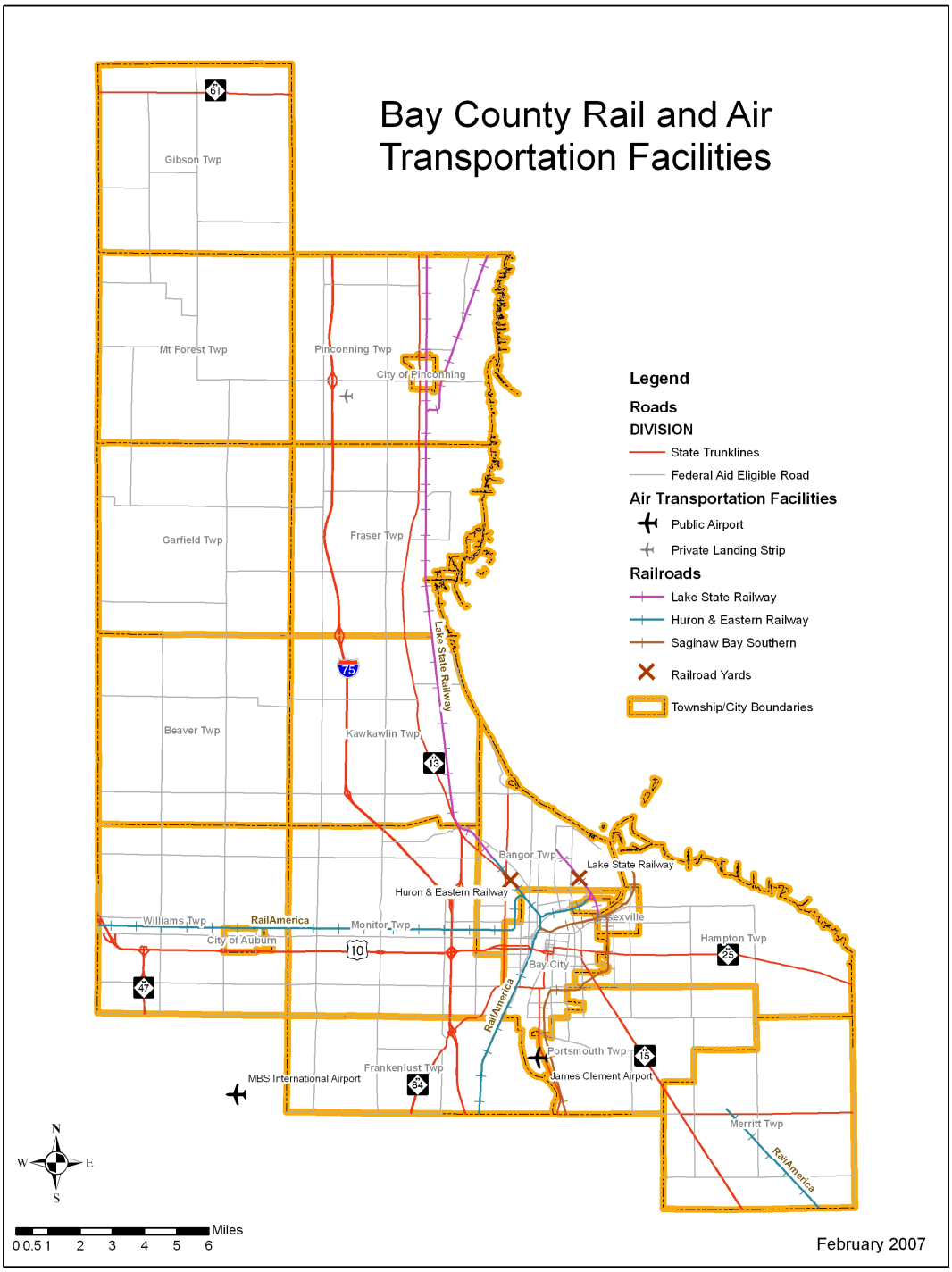
Abandonment of railroad service is allowed by federal law which permits a railroad carrier to end its obligation to provide service over a particular line. In the Bay City area, local officials have encouraged the reuse of abandoned railway lines as non-motorized railtrails. This effort has been very successful and is scheduled to continue.

In summary, the railroad's decline over the last two decades is evidenced in the trend toward the use of other modes for the movement of goods, changes in the type of commodities being shipped, and consolidation and diversification of rail systems. Yet, many of the State's leading manufacturing, agricultural and extraction industries still rely on the railroad as a means of efficient and economical shipment of bulk freight. Continued operation of smaller railroads will require a restructuring of

their systems in order to meet the demands of a changing market and intermodal competition.

Plan Recommendations:

1. Relocate rights-of-ways that will allow a blend of safety improvements, consolidation of rail traffic on fewer lines and increased operating efficiencies.
2. Continue upgrading of highway/ rail crossings.
3. Remove unused or abandoned rail lines.
4. Promote intermodal connection and access between rail and other modes of transportation.
5. Continue development and expansion of the existing railtrail system.
6. Increase security/safety of rail cars caring hazardous material through the BCATS region.


Bay County Rail and Air Transportation Facilities
Gibson Twp
Mt Forest Twp
Pinconning Twp
City of Pinconning
Garfield Twp
Fraser Twp
Beaver Twp
Kawkawlin Twp
Bangor Twp
Lake State Railway
Huron & Eastern Railway
Williams Twp
RailAmerica
Monitor Twp
City of Auburn
Sexville
Hampton Twp
Bay City
Portsmouth Twp
James Clement Airport
MBS International Airport
Frankenlust Twp
Merritt Twp
Legend
Roads
DIVISION
State Trunklines
Federal Aid Eligible Road
Air Transportation Facilities
Public Airport
Private Landing Strip
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Lake State Railway
Huron & Eastern Railway
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Water and Port Transportation

The number of commercial ports in Michigan remained at approximately 40 between 1990 and 2000. Michigan's important water borne commodities are stone, iron ore, coal, cement, salt petroleum, and chemicals. Tonnage handled ranged from a low of 52 million tons in 1982 to a high of 91 million tons in 1989. Traffic volumes are highly dependent on the steel and construction industries.

In 1986, federal legislation fundamentally changed the funding of navigation projects. Waterway users now pay the entire cost of maintaining navigation channels through a harbor tax and trust-fund mechanism. Non-federal contributions are now required for several types of navigation projects: new construction, navigation studies, and disposal of dredged material.

The Saginaw River is one of Michigan's most important commercial harbors. The port ranks about fifth in the value of commodities being shipped from Michigan ports. It ranks seventh in total tonnages and second in the number of terminals and diversity of cargoes.

Approximately 20 marine terminals are located along the river from Saginaw to the mouth of the river. These terminals handle approximately five million tons of cargo, annually and 320 ships in 2006. Major commodities include limestone, sand, coal, salt, fertilizers, cement, petroleum and chemicals. These products serve the manufacturing, agricultural, and construction industries throughout a large portion of the lower peninsula. Most water borne commerce on the Saginaw River consists of U.S. domestic and Canadian trades. A port study conducted by BCATS in 1984 concluded that the future for the port would be in terms of cargo handling.

In addition to shipping, Bay County's extensive river system is heavily utilized for recreational boating and fishing.

Plan Recommendations:

1. Promote the retention and upgrading of port facilities.

2. Promote intermodal connectivity and access between the port and other forms of transportation.

3. Assist in finding ways to keep up the maintenance on the river channel to keep shipping on the river.

4. Assist in the development of a new, more current port study with an emphasis on how the current, or additional, port facilities could be better utilized by existing cargo and diversify the products being shipped on the river to enhance the local economy.

Regional Intermodal Study

The Genesee County Metropolitan Planning Commission (MPO for the Flint area), in cooperation with its partners, the Flint Area Chamber of Commerce and the Michigan Department of Transportation, conducted the I-69/I-75 Intermodal Transportation Study to determine how the region of Genesee, Lapeer, Saginaw, St. Clair, and Shiawassee counties can capitalize on its location at a significant crossroads of the national and international freight network. By doing so, it is expected that economic conditions and the quality of life in the region will improve.

The study area is served by major transportation facilities such as I-69, I-75, U.S. 23, and a number of state highways; the Blue Water Bridge and double-stacked rail tunnel in Port Huron which link the United States and Canada; deep water ports in Saginaw (the study incorporates the deep water ports in Bay County), and Port Huron; airports in Saginaw County (MBS) and Flint (Bishop); and, the Canadian Nation (CN) and CSX rail lines. The current population of the five-county area is approximately 975,000 people. Major manufacturing, commercial, and agricultural entities, dominated by automobile-related businesses, form a major part of the economy, which employs 460,000 people.

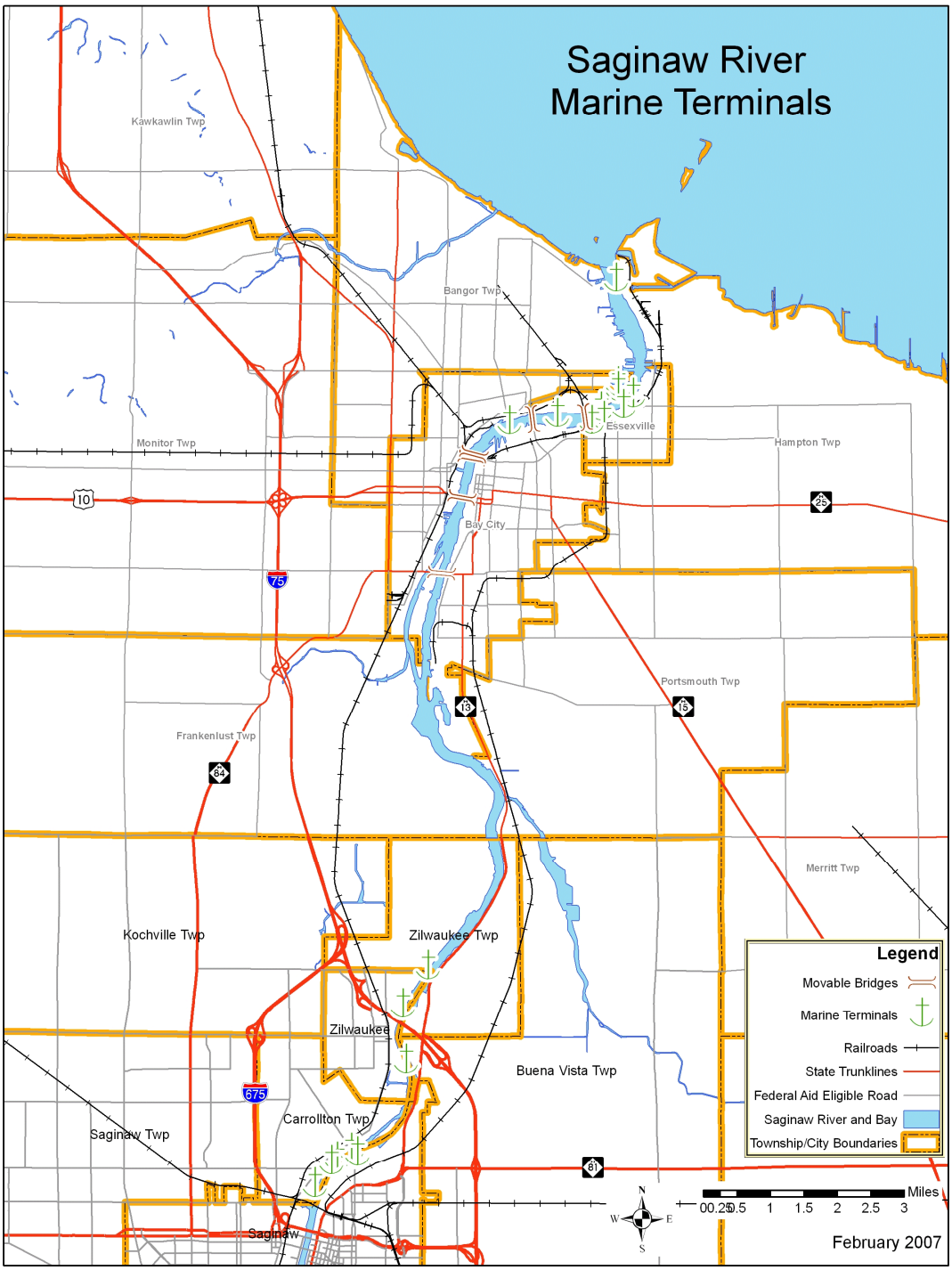
The vision of this study was forwarded to each county's Study Review Committee and the public for comment stated the following:

A major regional intermodal freight system serving trucks, trains, planes and ships with seamless interaction among all modes.

Overseen by an intermodal commission, the region will offer transportation assets supported by state-of-the-art intelligent transportation system (ITS) technologies.

This intermodal system provides a competitive advantage for commodity flow; creates a new dimension in the region's economy; and, improves the quality of life for the region's citizens.

While Bay County is not directly included in this study, due to the inclusion of the Saginaw County (MBS) airport, and the Bay County deep water ports the unfolding of this study could impact transportation issues and ultimately the financial health of the Bay City area.


Saginaw River
Marine Terminals
Kawkawlin Twp
Bangor Twp
Monitor Twp
Essexville
Hampton Twp
Bay City
Portsmouth Twp
Frankenlust Twp
Merritt Twp
Kochville Twp
Zilwaukee Twp
Zilwaukee
Buena Vista Twp
Carrollton Twp
Saginaw Twp
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Legend
Movable Bridges
Marine Terminals
Railroads
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Non-motorized Transportation

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) planning and funding guidelines have encouraged development of bicycle and other non-motorized transportation facilities.

Accommodating Bicycle and Pedestrian Travel: A Recommended Approach is a policy statement adopted by the United States Department of Transportation. USDOT hopes that public agencies, professional associations, advocacy groups, and others adopt this approach as a way of committing themselves to integrating bicycling and walking into the transportation mainstream.

The Design Guidance incorporates three key principles:

a) a policy statement that **bicycling and walking facilities will be incorporated into all transportation projects** unless exceptional circumstances exits;

b) an approach to achieving this policy that has already worked in State and local agencies; and

c) a series of action items that a public agency, professional association, or advocacy group can take to achieve the overriding goal of improving conditions for bicycling and walking.

Development of non-motorized facilities is one of the 16 transportation control measures allowed for funding applications under the Congestion Mitigation/Air Quality (CMAQ) program. Most SAFETEA-LU programs encourage development of projects that allow use of the bicycle to replace commuters, shopping or other trips otherwise taken by car.

New bicycle paths designed as either trails through parks or in the right-of-way of an abandoned rail line are being planned or are under construction. In either case, these new trails serve recreational riding as well as provide connections between major shopping and commercial centers.

A Watershed Initiative Network (WIN) grant provided funding for the Bay County Environmental Affairs Department, The Bay County Geographic Information System Program, and the Bay County Transportation Planning Division to inventory, digitally map, and develop cartographic files for publication of the existing non motorized trials within the Bay, Midland, and Saginaw county region. This tri-county trial mapping effort produced the publication of a Tri-County Trail Guide which has been well received by the general public is one component of a public awareness program promoting non-motorized transportation.

The state trunkline network has 2,000 miles of separate paths or wide paved shoulders suitable for bicycling. Counties and cities also have bicycling facilities. There are also non-motorized trails which are separate from any roadway. These paths rarely receive maintenance; almost none of the paved paths have ever been resurfaced. The condition of the shoulder bicycle paths reflects the condition of the roadways themselves, since the paths would normally be improved at the same time as the road.

In rural areas, the network of bicycle paths is fragmented lacking connections and continuity. Long distance cycling requires the use of either gravel roads on which bicycle travel is often difficult or high volume, high-speed highways on which cycling is hazardous.

The BCATS Area

The Riverwalk and Railtrail System consists of 17.5 miles of interconnected non-motorized paths within the townships of Bangor, Hampton, and Portsmouth as well as the city of Bay City. This system includes the Bay City Riverwalk, a 1.1 mile trail along the Saginaw River in downtown Bay City, the Railtrail, a 8.4 mile long trail that completes a loop with the Riverwalk, and completed in 2006, a 6.3 mile railtrail extension that connects the Railtrail Loop with the Bay City State Recreation Area non-motorized pathways.

Hampton Township has also recently completely a non-motorized trail the connects Finn Road Park and Campground to Knight Road along the Saginaw Bay. Eventually, this trail will be extended 5.5 mile to be connected with the existing Bay City Railtrail Loop.

In Fraser Township, plans are underway for converting the abandoned Detroit & Mackinaw Rail Line into a non-motorized pathway with a connection to the village of Linwood along Elevator Road. This trail is currently partially completed. Eventually, this trail will act as a connector between the existing trails in the city of Pinconning and the Bay City Trail System.

Planning efforts are ongoing to connect this non-motorized trail system to others trails in the region, such as a proposed connection between Delta Community College and Saginaw Valley State University along the M-84 Corridor and the Bay-Zilwaukee railway segment linking to the city of Zilwaukee in Saginaw County to the south. There are also proposed connections to trail systems developing in both Saginaw and Midland Counties. The following trail planning efforts portray the level of effort being expended in the BCATS study area, as well as, the greater Bay County area in regards to non-motorized transportation efforts.

BCATS has an adopted bicycle plan. This bicycle Plan has followed the Transportation Systems Monitoring (TSM) process as defined in the TSM Report by identifying bicycle transportation deficiencies, outlining solutions, determining priorities and will monitor those programs or projects

which have been implemented.

Plan Recommendations:

1. Incorporate non-motorized interests into the design of projects to ensure that as many streets and highways as possible can be safely shared by motorists and bicyclists, and identify specific routes that would act as connectors between existing non-motorized trails.

2. Improve bicycle facilities including: storage, shelters, comfort stations and automobile parking at trip ends for minor/major generators and transit hubs. Develop the width of paths, grading, drainage, barriers, fixed lighting, landscaping and structures where appropriate to accommodate users of the facilities.

3. Support the development of recreational non-motorized routes.

4. Improve safety issues such as drainage grate replacement, improving rail crossings, re-striping and alternate routing.

5. Encourage police agencies to provide stricter enforcement of bicyclists who disregard the Uniform Vehicle Code.

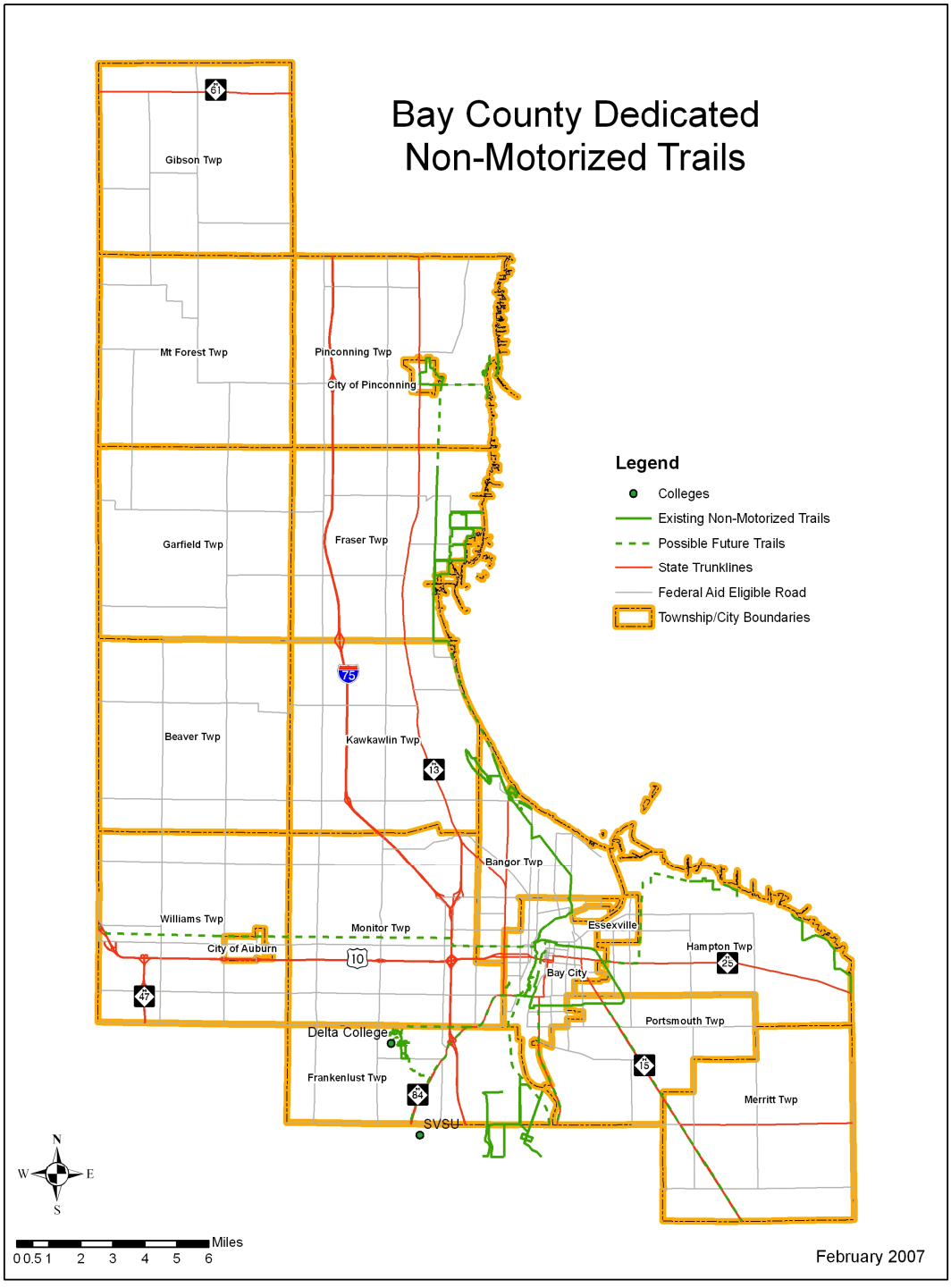
6. Acquire rights-of-way for independent bikeway and walkway construction.

7. Install curb ramps on new or existing facilities.

8. Provide traffic control devices, including signs, pavement markings, signals, and signal actuation devices.

9. Promote access between non-motorized and other modes of transportation.

10. Improve connectivity to transit routes.


Bay County Dedicated
Non-Motorized Trails
Gibson Twp
Mt Forest Twp
Pinconning Twp
City of Pinconning
Garfield Twp
Fraser Twp
Beaver Twp
Kawkawlin Twp
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Williams Twp
Monitor Twp
City of Auburn
Essexville
Hampton Twp
Bay City
Portsmouth Twp
Delta College
Frankenlust Twp
SVSU
Merritt Twp
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Intelligent Transportation Systems (ITS)

The BCATS planning process recognizes that ITS technologies must become an integral component of transportation plans and programs. BCATS will work toward the successful implementation of the objectives of the National ITS Plan.

The objective of The National Intelligent Transportation Systems Plan is to advance the safety, efficiency and security of the surface transportation system, provide increased access to transportation services and reduce fuel consumption and environmental impact.

The ITS Vision is to ensure that:
Future transportation systems will be managed and operated to provide seamless, end-to-end intermodal travel for passengers regardless of age, disability, or location, as well as efficient, seamless, end-to-end intermodal freight movement. Future transportation systems will be safe, customer oriented, performance driven, and institutionally innovative, enabled by information from a fully integrated spectrum of computing, communications, and sensor technologies. Public policy and private sector decision-makers will seize the opportunity to make IT'S A vital driver in achieving the vision of the transportation system for the 21st century. Objectives include:

- An electronic information network that works in concert with the physical infrastructure to maximize the efficiency, safety and utility of the system, encourage modal integration and consumer choice, and provide quick response in times of national crises.

- Far fewer and less severe crashes for all types of vehicles and far faster response and recovery when crashes do occur.

- Information for operators and users of the transportation system to help contain congestion and increase the effective capacity of the system while reducing the need for new construction.

- Facilities, technology, and information that help reduce energy consumption and negative environmental impact.

The introduction of ITS technologies into the institutional and funding framework of surface transportation, the current and proposed transportation infrastructure and future vehicle development offers the opportunity to achieve an Integrated Network of Transportation Information that will facilitate:

- Availability of information to allow travel choices wherever and whenever desired without being limited by physical disability, age or location.

- Full coordination between bus and rail transit, railroads, highway and arterial systems and eliminating missed connections, confusion during detours and diversions due to emergency and weather conditions.

- Timely and accurate commercial vehicle and freight data shared electronically among authorized stakeholders to support safety, security, productivity, mobility and environmental goals.

An Integrated Network of Transportation Information will require:
Forging new partnerships within and between the public sector at all levels and the private sector in its broadest sense, including manufacturers, carriers, service providers and travelers in all modes.

Research into traveler behavior and requirements, user response to new types of information and personal services, and the types and quality of data that will be most useful to travelers and that will affect their travel patterns and behavior.

Reaching out to the public safety community to assure a high level of communication and interface to support emergency and disaster response.

Interim Guidance issued by the USDOT:
The final rule and FTA policy on Intelligent Transportation Systems (ITS) Architecture and Standards were issued on January 8, 2001, to implement section 5206(e) of the Transportation Equity Act for the 21st Century (TEA-21). This final rule/policy requires that ITS projects funded by the Highway Trust Fund and the Mass Transit Account conform to the National ITS Architecture, as well as to USDOT adopted ITS Standards.

The final rule/policy means that: Regions currently implementing ITS projects must have a regional ITS architecture in place in four years. Regions not currently implementing ITS projects must develop a regional ITS architecture within four years from the date their first ITS project advances to final designs.

ITS projects funded by the Highway Trust Fund and the Mass Transit Account must conform to a regional ITS architecture. Major ITS projects should move forward based on a project level architecture that clearly reflects consistency with the National ITS architecture.

The Michigan Department of Transportation is currently in the process of developing an Intelligent Transportation System Architecture and Deployment Plan for the Bay Region. An introductory

meeting was held in December of 2006 to provide and overview of the project to discuss existing and planned ITS systems in the Bay Region. A second meeting held in January of 2007 engaged Transportation Planners and implementing agencies in a discussion of what resources are currently available and where ITS development might be the most beneficial. A Kick-off Workshop is planned in June of 2007 and an Architecture Workshop is planned in October of 2007. The final ITS Architecture and Deployment Plan is planned for February of 2008.